as in the earlier ones, the author has endeavored to keep abreast of the times, and we find mentioned here the results of recent synthetical experiments, such as those upon the sugars; and many new substances that in recent years have become prominent because of their medicinal properties have been introduced. While the book is not intended to be a text-book in the ordinary sense, nor to serve as an introduction to the science, it can, nevertheless, be strongly recommended to all students of chemistry, who, in connection with their lecture and laboratory courses, desire to have a convenient and compact reference book—a book containing all the more important facts of general and descriptive chemistry clearly stated and provided with an excellent index. EDWARD H. KEISER.

Field, Forest and Garden Botany. A simple introduction to the common plants of the United States east of the 100th Meridian, both wild and cultivated. By ASA GRAY. Revised and extended by L. H. BAILEY. American Book Co. 1895. 8vo. pp. 519.

The first edition of this useful popular botany was issued in 1868 as a companion book to the author's 'Manual of the Botany of the Northern United States.' The present revision is planned to fill the same place as relates to the sixth edition of the 'Manual,' giving, as it does, concise descriptions of the more common native plants, and of the large number of species cultivated for use or ornament. The number of the latter category has greatly increased during the twenty-seven years which have elapsed since the first issue of the work, and as regards these the treatment is exceedingly complete. The selection of the 'common' native species has been a matter of great difficulty, and in this the book will probably be found unsatisfactory. The more usual plants of the region north of Virginia and Tennessee are for the most part included, but the Southern native flora is almost wholly omitted, so that in this respect the title is misleading. As a guide to the cultivated species it will find its greatest value. It is our opinion, however, that if the scope of the work had been restricted to the domesticated flora, and the descriptions of these plants been more fully drawn out, it would have been more generally serviceable than by treating them with the native species.

The necessity which has been felt of making the book a companion to the 'Manual' has kept up the old and unfortunate arrangement of groups which we find in that work, although we are pleased to find that the Gymnosperms have been brought into their logical position.

N. L. B.

Description des ravageurs de la vigne. Insects et champignons parasites. HENRI JOLICOEUR. 4°. Riems et Paris. 1894. Pp. viii., 236, pl. 20.

This sumptuous volume with large pages and wide margins is one of the latest contributions to the rapidly increasing literature of disease of plants. The French have always taken the greatest interest in diseases of the vine, and quite naturally, because of the extent of the industry in their country. The author of the present volume is the general secretary of the Society of Viticulture and Horticulture of Reims, and while he brings to the subject a knowledge of what various French authors have to say upon the subjects discussed, from its pages there never could be gleaned the fact that the English speaking races had ever done any work upon the various diseases. This is, perhaps, a general fault of the French, since they are so imbued with admiration for their own country that other countries hold a very subordinate place.

The work under notice is divided into two parts, one treating of parasitic ani-

mals, the other of parasitic plants. The 'animals' treated of are mainly insects, and the various orders taken up are Lepidoptera, Coleoptera, Orthoptera, Hemiptera and Arachnida. Under each of these heads the species belonging to the orders are discussed, and facts are given regarding their life history, geographical distribution, natural enemies, influence of external conditions on development, means of destruction and bibliography. The cryptogamic enemies of the vine form the subject of the second part, and we have here discussions of Oidium, mildew, anthracnose, pourridie (caused by *Agaricus melleus*), *Vibrissea hypogea*, melanose, black rot and one or two others. There are no especially new facts given in the volume as far as observed. The plates are beautifully drawn and colored and have the merit of being mainly new, only a very few figures having been copied from other authors.

J. F. James.

Icones fungorum ad usum Sylloges Saccardianæ Accommodatæ. A. N. Berlese. Vol. 2, fasc. 1, pp. 28, pl. 45.

This, the first part of a new volume of this sumptuous work, has just been published. It sustains the high character of the first volume. In it Dr. Berlese discusses the species of Saccardo's section *Dictyosporæ* of the *Sphæriaceæ*, giving diagnosis of the species of *Pleomassaria*, *Karstenula* and *Pleospora*. Only two new species are described, viz., *Pleospora parvula* on stems of *Berberis vulgaris*, and *P. magnusiana* on culms and leaves of *Glyceria vahliana*. The latter name is proposed for *P. pentamera* of Berlese's monograph, as the form is now considered distinct from Karsten's species of this name. *Pleospora carpinicola* Ell. & Ever. is transferred to the genus *Karstenula*; and *P. hysteroides* Ell. & Ever. is regarded as a sub-species of *P. andropogonis* Niessl. These are all the changes proposed, which seems quite remarkable in these days. The illustrations are excellent, and while some species seem to be perilously near others, doubtless a carefully discriminating eye would be able to separate them.

Joseph F. James.

Washington, D. C.

NOTES AND NEWS.

General John Newton, U. S. A., engineer, died on May 1, at the age of seventy-two years. He was elected a member of the National Academy of Sciences in 1876.

Dr. Karl Ludwig, professor of physiology in the University of Leipzig, died on April 27, at the age of seventy-nine years.

The *Johns Hopkins University Circular* for April contains the address made by President Low on the Nineteenth Commemoration Day, February 22. The address was entitled 'A City University,' and gives an admirable review of the scope of a great university and its relation to the city in which it is situated. After describing the different plans of the American, German, French and English university, Mr. Low continued: "The aim which the German university has set before itself and which it has very largely realized under the conditions natural to German life, is the aim, in my judgment, which the American university also should set before itself, and which it must realize under the conditions natural to American life. Because, after all has been said, the world is ruled by its thinkers, and civilization is carried forward by the patient investigators of natural laws; the lives of men are largely shaped by the teachings of experience as revealed by historic study; and the literature of men is enriched by every addition to our knowledge of the literature and language of the past. Nature's craftsmen in all these directions will produce results according to their gifts outside of a university if they get no opportunity within it. But the history